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What is claimed is:

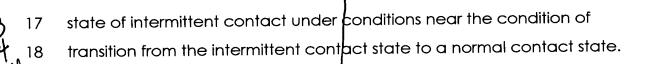
1	1.	An actuator for moving a driven member, said actuator
2	comprising:	
3		a displacement element for producing a specific
4	displaceme	
5		a drive member connected to one end of said displacement
6	element ar	nd which transfers the displacement of said displacement
7	element to	a driven member;
8		a stationary member which supports the other end of the
9	displacement element;	
10		a compression member for pressing said drive member against
11	the driven member; and	
12		a drive circuit for driving said displacement element such that
13		nember and the driven member are in a state of intermittent
14	contact ur	nder conditions near the condition of transition from the
15	intermitten	nt contact state to a normal contact state.
1	2.	An actuator as claimed in claim 1, wherein a following
2	relationship is satisfied:	
3		Nt=X0(1/(1/k2+1/k3)-1/(1/k1+1/k2+1/k3))
4		when the spring constant of the compression member is
5		d k1, the combined spring constant of the displacement element
6	and the drive member is designated k2, the spring constant of the driven	
7	member is designated k3, the ambunt of displacement of the	
8	displacem	nent element is designated X0, and the compression force
9	applied b	y the compression member is designated Nt.



- 1 3. An actuator as claimed in claim 2, wherein said drive circuit drives said displacement element at a resonance frequency.
- 1 4. An actuator as claimed in claim 1, wherein said drive circuit 2 drives said displacement element at a resonance frequency.
- 1 5. An actuator as claimed in claim 1, wherein said displace 2 element is a laminate-type piezoelectric element.
- 1 6. An actuator as claimed in claim 5, wherein said displace
 2 element includes alternating layers of a plurality of piezoelectric thin plates
 3 and electrodes.
- 7. An actuator for moving a driven member, said actuator2 comprising:
- a first displacement element for producing a specific
 displacement;
- a second displace element for producing a specific

 displacement of which direction has a predetermined angle to a direction

 of the specific direction of said first displacement element;
- a drive member connected to one ends of said first and second displacement elements and which transfers the displacement of said first and second displacement elements to a driven member;
- a stationary member which supports the other ends of the first and second displacement elements:
- 13 a compression member for pressing said drive member against 14 the driven member; and
- the driven member; and
 a drive circuit for driving said first and second displacement
 elements such that the drive member and the driven member are in a



- 1 8. An actuator as claimed in claim 7, wherein a following 2 relationship is satisfied:
- 3 $Nt=XO(1/(1/k^2+1/k^3)-1/(1/k^1+1/k^2+1/k^3))$
- 4 when the spring constant of the compression member is
- 5 designated k1, the combined spring constant of the first and second
- 6 displacement elements and the drive member is designated k2, the spring
- 7 constant of the driven member is designated k3, the amount of
- 8 displacement of the first and second displacement elements is designated
- 9 X0, and the compression force applied by the compression member is
- 10 designated Nt.
 - 1 9. An actuator as claimed in claim 8, wherein said drive circuit
- 2 drives said first and second displacement elements at a resonance
- 3 frequency.
- 1 10. An actuator as claimed in claim 7, wherein said drive circuit
- 2 drives said first and second displacement elements at a resonance
- 3 frequency.
- 1 11. An actuator as claimed in claim 7, wherein each of said first
- 2 and second displace elements is a laminate-type piezoelectric element.
- 1 12. An actuator as claimed in claim 11, wherein each of said first
- 2 and second displace elements includes alternating layers of a plurality of
- 3 piezoelectric thin plates and electrodes.